IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1. (Currently Amended) An image reading device comprising:

an imaging device that has photo-diodes and color filters provided on said imaging device, said color filter having color filter elements of a plurality of colors, said photo-diodes generating an original image data containing pixel data, each of which corresponds to one of said colors which are arranged in a predetermined distribution;

a reading processor that reads said pixel data from said imaging device;

a thinning processor that thins out some of said pixel data to generate a thinned image data, the thinned pixel data being uniformly distributed, spaced from each other and colors of the thinned pixel data being arranged in said predetermined distribution; and

an interpolation processor that performs an interpolation process on said thinned image data to generate an interpolated image data for each of said colors.

2. (Original) A device according to claim 1, wherein said colors of said original image data are arranged in such a manner that a (m x m) matrix, formed by said plurality of colors, is repeated, and said thinning processor thins out (m x (n-1)) number of pixel data for every (m x (n-1)+1) number of pixel data in a horizontal direction and a vertical

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direction of an image corresponding to said original image data, wherein each of "m" and

"n" is a positive integer greater than 1.

3. (Original) A device according to claim 2, wherein said colors of said original

image data are arranged in such a manner that a (2 x 2) matrix, formed by said plurality of

colors, is repeated, and said thinning processor thins out (2 x (n-1)) number of pixel data

for every (2 x (n-1)+1) number of pixel data in a horizontal direction and a vertical

direction of an image corresponding to said original image data.

4. (Original) A device according to claim 3, wherein said thinning processor thins

out 2 pixel data for every 3 pixel data.

5. (Original) A device according to claim 3, wherein said thinning processor thins

out 4 pixel data for every 5 pixel data.

6. (Previously Presented) A device according to claim 4, wherein said colors of

said color filter elements are arranged in the Bayer arrangement.

7. (Previously Presented) A device according to claim 4, wherein said color filter

has red filter elements, green filter elements and blue filter elements, and in said (2 x 2)

matrix, said green filter elements are positioned on a diagonal line, and said red filter

element and said blue filter element are positioned on another diagonal line.

8. (Original) A device according to claim 3, further comprising a reduction ratio setting processor that sets a reduction ratio in accordance with which the number of pixel data thinned out by said thinning processor is determined.

9. (Original) A device according to claim 1, further comprising a reduced image indicating processor that forms a color image based on said interpolated image data and indicates said color image.

10. (Currently Amended) An image reading device in which pixel data of a first image, formed on an imaging device having an on-chip color filter of a plurality of colors, are point-sequentially read from said imaging device and subjected to an interpolation process to generate components of said plurality of colors for each of said pixel data to obtain a second image, said image reading device comprising:

a thinning processor that thins out some of said pixel data before said pixel data are subjected to said interpolation process, so that said second image is composed of a smaller number of pixels than said first image,

wherein the thinned pixel data are spaced from each other and uniformly distributed.

11. (Previously presented) A device according to claim 5, wherein said colors of said color filter elements are arranged in the Bayer arrangement.

12. (Previously Presented) A device according to claim 5, wherein said color filter has red filter elements, green filter elements and blue filter elements, and in said (2 x 2) matrix, said green filter elements are positioned on a diagonal line, and said red filter element and said blue filter element are positioned on another diagonal line.